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09/788,234	02/16/2001	Frank Kelly	PD-200321	4109

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EXAMINER

NALEVANKO, CHRISTOPHER R

ART UNIT PAPER NUMBER

2611

DATE MAILED: 06/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/788,234

Applicant(s)

KELLY, FRANK

Examiner

Christopher R. Nalevanko

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 16 February 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-40 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-40 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 15 Nov. 2001.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1. Claims 1, 6-9, 14-17, 22-25, 30-33, and 35-40 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Reichman et al (6,240,073).

Regarding Claim 1, Reichman shows a communication system for exchanging signals (fig. 1, col. 4 lines 45-50, reverse link satellite communications system) comprising a plurality of terminals configured to communicate through the exchange of the signals (fig. 1 item 24, col. 8 lines 55-60, plurality of terminals), each of the plurality of terminals includes a transmitter configured to transmit the signals (col. 8 lines 55-67, reverse link between terminal and hub), and a hub configured to communicate with the plurality of terminals (col. 8 lines 55-67, hub 18), the hub transmitting control signals to one of the plurality of terminals to modify operation of the one terminal (col. 13 lines 35-67, message preamble containing frequency hopping sequences, ID, hop code, hop sequence, time when to start reception, col. 14 lines 7-20, 55-67, control data such as synchronization data, transmission of parameters).

Regarding Claim 6, Reichman shows that the hub is connected to a packet switched network (col. 6 lines 44-50, external packet switched network).

Regarding Claim 7, Reichman shows that the network is an Internet Protocol network (col. 6 lines 44-50).

Regarding Claim 8, Reichman shows that the hub and terminals communicate with a satellite for two-way communication (fig. 1 item 17, col. 8 lines 55-67, satellite communications network with reverse link).

Regarding Claim 9, the limitations of the claim have been discussed with regards to Claim 1.

Regarding Claims 14-16, the limitations of the claims have been discussed with regards to Claims 6-8.

Regarding Claim 17, Reichman shows a method for exchanging signals in a communications system having a hub (col. 8 lines 55-67, hub 18), the method comprising receiving control signals from the hub (col. 13 lines 35-67, message preamble containing frequency hopping sequences, ID, hop code, hop sequence, time when to start reception, col. 14 lines 7-20, 55-67, control data such as synchronization data, transmission of parameters) and selectively modifying operation of a transmitting unit of a terminal in response to the control signals (col. 5 lines 35-47, col. 6 lines 20-42, switching means for switching transmitter mode).

Regarding Claims 22-24, the limitations of the claims have been discussed with regards to Claims 6-8.

Regarding Claim 25, the limitations of the claim have been discussed with regards to Claim 17.

Regarding Claims 30-32, the limitations of the claims have been discussed with regards to Claims 6-8.

Regarding Claim 33, Reichman shows a computer readable medium carrying one or more sequences of one or more instructions for exchanging signals in a communications system having a hub, the instructions cause the processors to perform functions (fig. 5, col. 20 lines 35-67, baseband processor, col. 21 lines 3-12, hub controller providing control and status signals). The remaining limitations of the claim have been discussed with regards to Claim 17.

Regarding Claims 38-40, the limitations of the claims have been discussed with regards to Claims 6-8.

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 2, 10, 18, 26, and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reichman et al (6,240,073) in further view of Linsky et al. (2004/0198218).

Regarding Claim 2, Reichman shows the ability to changed the transmission mode of the terminal in response to control signals from the hub (col. 5 lines 35-47, col. 6 lines 20-42, switching means for switching transmitter mode). Reichman fails to specifically state that this mode selection control signal can shut down the transmitter. Linsky shows disabling the transmitter of one terminal, rendering it inoperable (page 2 section 0017, page 3 section 0036, page 4 section 0043, deactivating the transmitter for the traffic transmit time). It would have been obvious to one of ordinary skill in the art that the time the invention was made to modify Reichman with the ability to shutdown the transmitter, as shown in Linsky, so that valuable power would be saved and there would be less interference with other signals.

Regarding Claim 10, the limitations of the claim have been discussed with regards to Claim 2.

Regarding Claim 18, Reichman shows the ability to changed the transmission mode of the terminal in response to control signals from the hub (col. 5 lines 35-47, col. 6 lines 20-42, switching means for switching transmitter mode). Reichman fails to specifically state that this mode selection control signal can shut down the transmitter. Linsky shows disabling the transmitter of one terminal, rendering it inoperable (page 2 section 0017, page 3 section 0036, page 4 section 0043, deactivating the transmitter for the traffic transmit time). Linsky further shows enabling the transmitter (page 3 section 0036, transmitter should remain active). It would have been obvious to one of ordinary skill in the art that the time the invention was made to modify Reichman with the ability to shutdown

the transmitter, as shown in Linsky, so that valuable power would be saved and there would be less interference with other signals.

Regarding Claim 26, the limitations of the claim have been discussed with regards to Claim 18.

Regarding Claim 34, the limitations of the claim have been discussed with regards to Claim 18.

3. Claims 3-5, 11-13, 19-21, 27-29, and 35-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reichman et al (6,240,073) in further view of Estinto (6,411,797).

Regarding Claim 3, Reichman fails to show transmitting a prescribed test pattern in response to control signals. Estinto shows transmitting a prescribed test pattern in response to a control signal (col. 2 lines 45-67, col. 3 lines 40-52, sequence pattern generator for test pattern, periodic test pattern). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Reichman with the ability to send a test pattern, as shown in Estinto, in order to measure the performance characteristics of the satellite communication system.

Regarding Claim 4, Reichman shows that the terminals transmit over a predetermined frequency (col. 10 lines 7-30, col. 11 lines 45-67, col. 13 lines 60-67, col. 14 lines 1-20, 50-67, predefined frequency hopping sequences, col. 15 lines 25-50, channel assignment).

Regarding Claim 5, Reichman shows that the hub specifies the frequency (col. 19 lines 30-67, hub controls the synchronization of frequencies).

Regarding Claims 11-13, the limitations of the claims have been discussed with regards to Claims 3-5.

Regarding Claims 19-21, the limitations of the claims have been discussed with regards to Claims 3-5.

Regarding Claims 27-29, the limitations of the claims have been discussed with regards to Claims 3-5.

Regarding Claims 35-37, the limitations of the claims have been discussed with regards to Claims 3-5.

### *Conclusion*

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Ogus U.S. Patent No. 6,587,875 discloses a network protocol and associated methods for optimizing use of available bandwidth.

Butler U.S. Patent No. 6,771,620 discloses a transmit gating in a wireless communications system.

Hannah et al U.S. Patent No. 5,774,788 discloses a remote ground terminal having an outdoor unit with a frequency multiplier.

Gilhousen et al U.S. Patent No. 4,979,170 discloses an alternating sequential half duplex communication system.



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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher R. Nalevanko whose telephone number is 571-272-7299. The examiner can normally be reached on M-F 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Grant can be reached on 571-272-7294. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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